Xiamen Tianyan
Instruments Co., Ltd

Sigma2008A

eddy conductivity meter

Xiamen Tianyan

Specialize in R & D, manufacturing and sales of detecting instrument

Design by the newest modern technology

Sigma2008A series' portable digital eddy current conductivity meter, is the product of digital conductivity meter designed with eddy phase. It is our patented product, which have the leading technology performance.Special te mperature coefficient setting and auto calibrating mode ensurethe measurement accuracy under different ambie nt temperature.Great lift-off compensation and temperaturecompensation, ensure every measurements right.Erg onomic shell is easy to carry and hold by one hand. The large screen LCD with back-light and large characteris f or clearly viewing in any light.

Two temperature compensation mode
Even if the block's temperature is different with the material, it could automatically compensate the temperature to 20℃ by e ntering the material's temperature and temperature coefficient

Powerful capacity to overcome the foreign matter layer on surf ace: Up to 0.5mm lift-off compensation design, for maintaining the measuring accuracy when the non-conductive foreign mat ter layer as coatings, dust or rough on the material surface. An d it can reduce the error due to manual operation

Gain the measurement result quickly and immediately
It can output the measurement result within 1 second of the probe contacting with the material. Provide the quick and accurate measurement with you.

Large measurement range
The whole measurement range from 0.3MS/m to 65MS/m can be used for measuring all the non-ferrous m etal and alloy

Satisfy the different measuring requirement
It can measure the conductivity (MS/m) , the conductivity (%IACS), and the resistivity ($\mu\Omega\bullet mm^2$) at the same time. One keyboard toggle can help you get all data easily

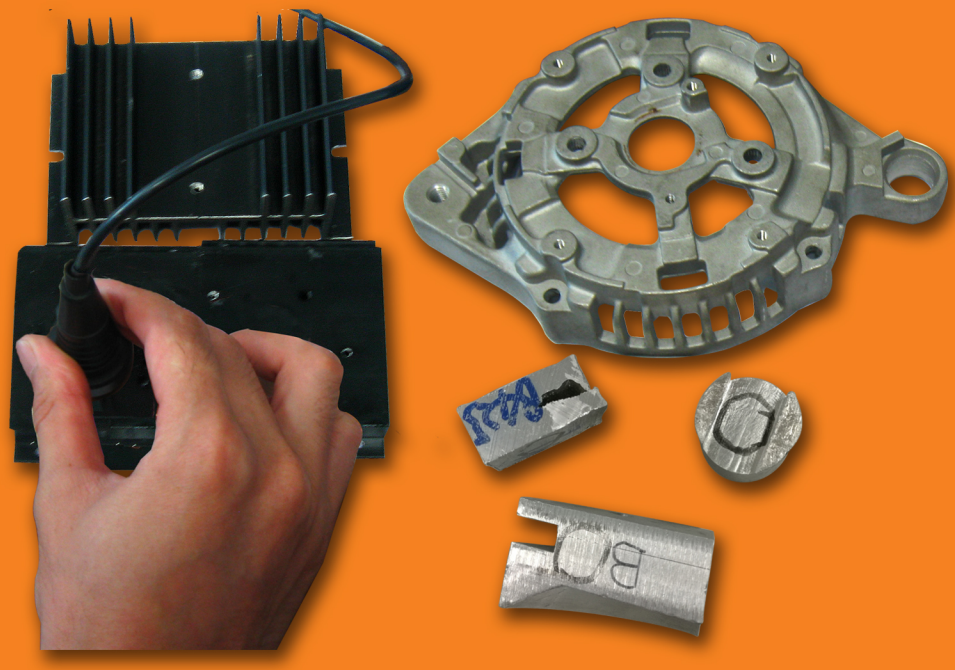
Use anytime and anywhere
High intensity back-light design can help you see the screen clearly in any light

Innovation high-performance probe design

Gain unanimously recognition at home and abroad

Sigma2008A series' instrument equip new type probe. The front of probe is made by the new hard-wearing and heat-resistant material, which greatly enhance the probe service life. The chip inside the probe realize the functions of the front-end data processing, which greatly improve stability and get the absolute interchangeability. Even if the probe files, you wouldn't return the whole instrument back to factory repair, but only need replace a new probe and go on testing。

Lift-off compensation is a important parameter of conductivity meter. The longer of compensation distance, the more powerful capacity to overcome the gap between probe and tested material. A series has 500μm huge lift-off compen sation. Even if there are rough surface and non-conductive layer as paint, plastic film or dust, you could get the accur ate testing data only if the gap is less than 500μm. Lift-off compensation not only overcome the foreign matter layer on surface, but also reduce the error due to manual operation



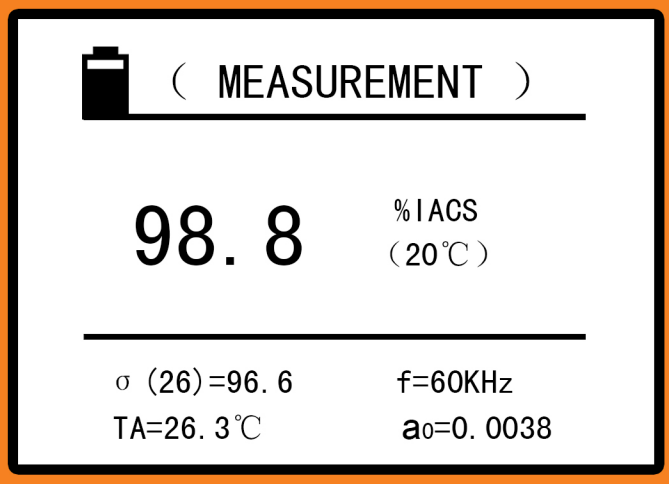
Professional and humanized interface design

Satisfy working requirements in all kinds of fields

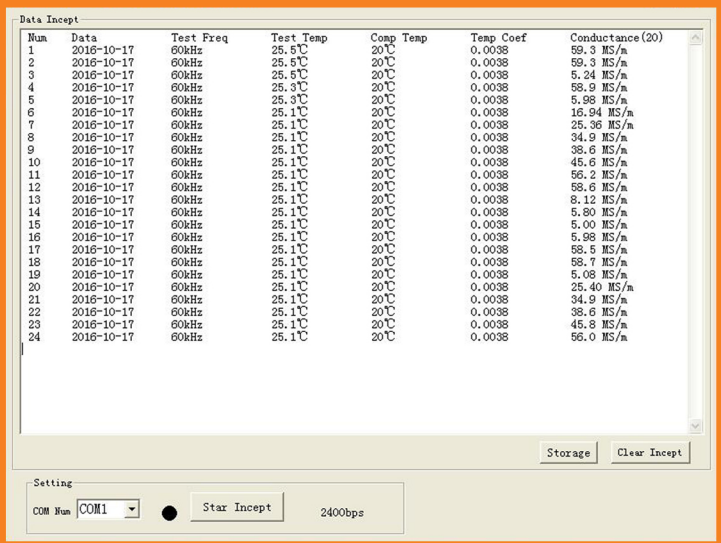
TYPICAL APPLICATIONS

- Conductivity and resistivity measurement of non-ferromagnetic material
- Determining extent of thermal treatment
- Checking thermal damage, material fatigue and crack
- Determining metal purity
- Monitoring of metal homogeneity
- Metal classification
- Monitoring of strength and hardness
- Detecting the density of powder metallurgy parts

Conductivity and resistivity testing can be done at same time. The instrument probe has two temperature compensation modes. Even if the block's temperature is different with the material, it could automatically compensate the temperature to 20℃ by entering the material's temperature and temperature coefficient. The screen can display several important pa rameters, including the material conductivity values at 20℃, the material conductivity values at current temperature, te sting frequency, the material temperature coefficient, the current temperature, etc. A series' measuring precision is up to ±0.5%, keeping the error range to a minimum. And we can offer you the calibration certificate by China Metrology Instit ute. All of these make your every measure get the most reliable result.



The instrument has data memory, which can save 500 sets of measuring date. By connecting the computer, it can create more complete reports. You can also save the data as ".txt" or ".xls" file, so as to organize it, filter it and print it out.



TECHNICAL PARAMETER

Sigma2008A DIGITAL CONDUCTIVITY METER

Working Freq.	60KHz, sine wave
Measurement range for conductivity	0.51 %IACS to 112 %IACS, or 0.3 MS/m to 65 MS/m,or resistivity 0.015388 to3.33333Ω•mm²/m
Resolving power	0.01%IACS(when <51%IACS); 0.1%IACS(51%IACS to 112%IACS)
Measuring precision	±1% (temp range, 0℃ to 40℃) ±0.5%(temp range, 20℃)
Lift-off effect	Probe compensation 0.5mm
Temp. measurement	0℃ to +50℃(precision 0.5℃)
Function of auto compensation	Measured result of conductivity, adjusting to value at temp. 20℃ automatically
Normal working environment	Temp. 0℃ to +50℃; relative humidity, 0 to 95%
Display	Liquid crystal big screen, back-light designed, multiple items of important parameter displayed simultaneously.
Power supply	Equipped with a lithium ion battery of 2200mA/h
Probes	One probe of diameter ¢14mm, working freq. 60KHz, for instrument model A; Probes are interchangeable.
Reading memory	Storage for 500 groups of measured data files.
Communication with PC machine	RS 232 interface
Weight of host machine	0.5kg (including batteries)
Dimension of host machine	220mmx95mmx55mm
Shell of instrument	Engineering plastic, high impact-resistance, waterproof shell for this instrument
Package and protection	High impact-resistance, waterproof, portable box made of aluminium alloy; inside of it there are instrument, probes, communication cable, operation manual, conductivity blocks, recharger, instrument stand, optical disk.
Accessories	2 pieces of standard conductivity blocks for model A1; 3 pieces of standard conductivity blocks for model A. You can purchase more blocks if you wish.

Xiamen Tianyan's business concept

Tianyan Company has a group of experienced and skilled product development engineers. We are committed to the development of conductivity meter that measure non-ferrous metal conductors, wires and cables, semicond uctors, powders and other areas. We always insist "scientific and technological innovation, quality first, integri ty-based" as business concept. We provide technical guidance for free, and you are welcome to inquire or discu ss.

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